GAC GTG 36 45 TCG GCG AAC TGT රජය රජර 27 GAG 18 TGT TGT GCT ( 9 GGG AAG TAG AGG TCT

108 ACT CCTCGC GCA 99 ည္သ CCG TGG 90 TCA GCC 81 CGC GTC 1GC 72 CCC CGG CIC 63 GGA CTG

162 TTC F AGT S TTC F 153 GGC G CTGᆸ TTGᄓ 144 TGT C ACC T ည္ဟ ¥ 135 GGG G CICı CGT 126 CCT P CGG R ACG T 117 GAG E ATG M SCC

216 GGA G TTT GGT G 207 AAG K GGA G CTT L 198 GGG G AAT N CAT H GGA G 189 GAT D TCT S 180 TCT S ATC GTC V 171 CTC L CTC L CTG L

270 AGT S GCC A GCT A 261 GCA A GAA E AAA K 252 AAG K 999 9 GAT D 243 GAA E CTG L ACA T 234 AGG R TGG W CAT H 225 ATT I CAT H GAT D

324 GCT A AAA K TGC C 315 GCT A GGA G TGT C 306 TGG W TCC AAA K 297 CAT H ATT I ATT I 288 GTG V ATG ( CTG L 279 CCC P CTG L GGA G

378 TTT F AAT N CAT H 369 TCC S CTC GAA E 360 TCA S ATT I GAA ACG T TCT S GAA E 342 GCA A TTT ( AAA K CCC AAG K

#### FIGURE 1A

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432 CCT P	486 CAT H	540 AGT S	594 GAT D	648 TCT	702 GGA	756 GAA
AGC S	GTG V	GTC V	GGT G	CCT	TGA	CTG
TTC	AAG K	TAT Y	ACG T	၁၁၅	TAT	ACA
423 GAT D	477 GGC G	531 TTT F	585 CTG L	639 TGT	693 GAA	747 CCT
GAA E	AGT S	${\tt TAT} \\ {\tt Y}$	AGG R	GAA	AGG	CTA
GAT D	CCC	AAG K	GAA E	CAT	GGA	TTC
414 AAA K	468 GAT D	522 TAC Y	576 CAG Q	630 TAA	684 CAG	738 TCA
CCC	CTG L	AGC S	GCT	TTG L	CAG	ACC
GAA E	TTT F	CCC	GAA E	GAA E	AAG	GAA
405 GAG E	459 CTT L	513 AAC N	567 AAG K	621 GAT D	675 GGA	729 CAG
GAA E	ATC	GGA G	ATG M	GAA E	3 GAA	GAC
GAT D	CGA R	AAT N	999 9	CTT L	CTG	CCC
396 GAG E	450 CCA P	504 GAG E	558 CAG Q	612 CAT H	666 GTT	720 TAA
CTT	ATT I	AAT N	GTT V	AAA K	AGT	AAT
AAT N	TAT Y	ATC I	GTT V	AAG K	GTT	AAC
387 GTA V	441 GGT G	495 ATC I			657 AGA	711 TAG
ATG	999 9	GAA E	GAG E	TTC	6 C ATC A	ATC 1
GTT V	GAC D	CCT	GCC	GCC	TTC	ATC

#### FIGURE 1B

GGA GCG CTC TCA CTG TGG AAG AGT TCT GCT AAC AGA AGC TGG TCT GCA TGT TTG           GGA GCG CTC TCA CTG TGG AAG AGT TCT GCT AAC AGA AGC TGG TCT GCA TGT TTG           TGG ATC CAG GGA GGA GTT TCT CTT CTT CTT CTT CTT CTT CTT CTT	810 A TGT TTG	864 ACC TAA ATG	918 F GAG CCA	972 r ccr ccc	1026 C AAC GTT	1080 A ACA ATA	1134 CTG TTT	1188 TAC AGC	1242 3 TGC AGG
GCG         TCA         T74         AGT         TCB         TCG         AGG         AGG <td>1 T</td> <td></td> <td></td> <td></td> <td></td> <td>1 A ATZ</td> <td>5 C AGO</td> <td>9 I TTC</td> <td></td>	1 T					1 A ATZ	5 C AGO	9 I TTC	
GCG         TCA         T74         AGT         TCB         TCG         AGG         AGG <td>. 80 3G TC</td> <td></td> <td></td> <td>96 DD DI</td> <td>101 [T TT</td> <td>107 2A AC</td> <td>112 \T AT</td> <td>117 'A AA'</td> <td>123. A TG</td>	. 80 3G TC			96 DD DI	101 [T TT	107 2A AC	112 \T AT	117 'A AA'	123. A TG
GCG         TCA         T74         AGT         TCB         TCG         AGG         AGG <td>GC T</td> <td>TC C</td> <td>AC AC</td> <td></td> <td></td> <td>CA AC</td> <td>AG GA</td> <td>TC CC</td> <td>AC GC</td>	GC T	TC C	AC AC			CA AC	AG GA	TC CC	AC GC
GCG         TCA         T74         AGT         TCB         TCG         AGG         AGG <td>792 AGA A</td> <td>846 CTT 1</td> <td></td> <td></td> <td>008 FAG C</td> <td>)62 ACA A</td> <td>116 4CC A</td> <td>170 TC T</td> <td></td>	792 AGA A	846 CTT 1			008 FAG C	)62 ACA A	116 4CC A	170 TC T	
GCG         TCA         T74         AGT         TCB         TCG         AGG         AGG <td>AAC</td> <td></td> <td></td> <td>TTG</td> <td>1( TAG</td> <td>1( ACA /</td> <td>11 CCT 1</td> <td>11 GGC 1</td> <td>12 TGT 1</td>	AAC			TTG	1( TAG	1( ACA /	11 CCT 1	11 GGC 1	12 TGT 1
GCG         CTC         TCA         TGG         AAG         AAG <td>GCT</td> <td>CTT</td> <td></td> <td>TAT</td> <td></td> <td>AAA</td> <td></td> <td>GTG</td> <td></td>	GCT	CTT		TAT		AAA		GTG	
GCG         CTC         T74           GCG         CTC         TGG           ATC         CAG         AGA         GTG           ATC         CAG         AGG         ATG           GGA         TGT         TGA         ATG           TTA         CTC         TTA         GTG           TTA         CTC         TA         GTG           ATT         GCA         TGT         ATG           ATT         GCA         TGA         TCA           L1089         TGT         AAA         TCA           CCT         AAG         TGT         ATG           TTA         TTT         TTT         CTG           TTT         TTT         TTT         TGA           TTT         TTT         TTT         TGA	783 TCT	837 TTT	891 ATG	945 AAG	999 GGA	1053 TAA	1107 CTA	1161 ATT	1215 CTT
GCG         CTC         T74           GCG         CTC         TGG           ATC         CAG         AGA         GTG           ATC         CAG         AGG         ATG           GGA         TGT         TGA         ATG           TTA         CTC         TTA         GTG           TTA         CTC         TA         GTG           ATT         GCA         TGT         ATG           ATT         GCA         TGA         TCA           L1089         TGT         AAA         TCA           CCT         AAG         TGT         ATG           TTA         TTT         TTT         CTG           TTT         TTT         TTT         TGA           TTT         TTT         TTT         TGA	AGT	GAC	AGA	CTT	AAA	CAT		ATA	GAG
GCG         CTG         TCA           GCG         CTG         TCA           ATC         CAG         CGG           ACT         TGT         TTA           TTA         CTC         ACC           TTA         CTC         ACC           TTA         CCT         ACC           TTT         TTT         TTT           TTT         CCT         TTT           TTT         CCT         TTT           TTT         CCT         CTT	AAG	GCA	TAA			TAT	GTT	GGA	
GCG         CTG         TCA           GCG         CTG         TCA           ATC         CAG         CGG           ACT         TGT         TTA           TTA         CTC         ACC           TTA         CTC         ACC           TTA         CCT         ACC           TTT         TTT         TTT           TTT         CCT         TTT           TTT         CCT         TTT           TTT         CCT         CTT				936 CTC		1044 GCT	.098 TCA	.152 CTG	.206 ATG
GCG CTC 819 ATC CAG 873 ACT TGT 981 TTA CTC 1089 CCT AAG 1143 CCC TTT TTT CCT	CTG	AGA	TGA	CTC	TTA	1 GTA		CTC	CTC
765 GCG CTC 819 ATC CAG 873 ACT TGT 981 TTA CTC 1089 CCT AAG CCT AAG CCC TTT TTT CCT	TCA	990	CAT	TTA	ACC	GAA	TGT	TTT	CTT
GCG ATT ATT ATT CCT CCT TTTT	765 CTC		873 TGT	927 TGT	981 CTC				.197 CCT
GGA TGG TCA AAA AAA CTC	505	ATC	ACT	GGA	TTA	1 ATT	CCT	CCC	1 TTT
	GGA	TGG	TCA	CTT	ACT	AAA	AAT	TTT	CTC

### FIGURE 1C

1278 1287 1296 TGG AAG CAT GCT TTC CCT TGT TAC	1350 TCA AGT CAT	1404 FTG TAC CAT	
1287 GCT TTC (	1332 1341 GGT GTA GCC ATT TTG	1395 GAT AAA ATA TTG	
CAT	သည	GAT	م-
1278 3 AAG	1332 ' GTA	1368 1377 1386 TTT TGT ACT GGC ATT AAC AAA AGA	1422 1431 1440 AAA CTT TAA AAG GAA AAA AAA 3'
TGG	GGT	AAA	AAA
AGG	CTA	AAA	AAA
1269 CTC GGC TCC AGG	1323 CTT CAA GCC CTA	1377 : AAC	1431 GAA
၁၅၅	CAA	ATT	AAG
CTC	CTT	299	TAA
1260 CTT GGA	1314 AAC TCA AAC	1368 ' ACT	1422 CTT
CTT	TCA	TGT	AAA
GTG	AAC	TTT	ATA
	1305 AGA		
1251 ACT GGC TGT	1305 TGT TGG AGA	1359 CAA CTG TAT	1413 TAA ACT TTA
ACT	TGT	CAA	TAA

#### FIGURE 1D

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55 GAA	109 CTT L	163 GCC A	217 CGC R	271 TTT F	325 TGC C	379 ACC T
၁၁၅	CGA R	GCT A	CAA Q	ATG M	ACG	AAA K
ACG	CCG	TCT	ACC	CTG	ATG M	GAT D
46 GTT	100 GTG V	154 CTC L	208 CCC P	262 ATC I	316 CTG L	370 AAT N
သည	TCG	CTG L	CTG L	GAG E	TTC F	TTC
GTG	TAT Y	GCC	GGT G	GTG V	ATG M	TAC Y
37 GCA	91 GTG V	145 TCG S	199 CAC H	253 GAA E	307 TCC S	361 AAG K
CGA	CTC	CTG L	TGC	AGA R	AGA R	
28 CGC CGG (	GCT		CTC	TGG W	CGC	TAT
	82 ATT I	136 TAC Y	190 CCG P	244 GAC D	298 AAC N	352 GAG E
CTA CGA	CTA	TAC Y	CCG P	TTT F	AAG K	CCT
	CCT	CCT P	CTG	GAC	ATG M	ეე ე
19 GAC	73 GCA A	127 CAA Q	181 AAA K	235 TGT C	289 ATG M	343 ATG M
CGA	$ ext{TTG}$	GCC	AGG R	CCG P	GTG V	TAT Y
999	GTC V	CTC I	GTG V	AAC N	ATT I	CTA L
10 GCG	64 GCG A	118 TGG W	172 CTC L	226 GGT G	280 GCC A	334 CCC P
GGG GAG	AAG ATG M	CGA R	CTA L	GAC D	AGT S	CCC
	AAG	TCA	TTC	GAA E	CTC L	AAA K
٠.						

#### FIGURE 2A

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433 TTT. F	487 TCC S	541 TAT Y	595 CTC L	649 ATT I	703 CGA R	757 GGA G
TTC	CTC			CAG		GCT
GAG E				CCA P		
424 GTG V				640 CGG R		
ATT I	TAT Y	GAT D	CTC	CGG R	GAG E	CTA L
TGG W	ATC	GTG V	CCC	ATG M	GAG E	AAA K
	469 CCT P					
	GCC					
AGG R	TTT F	TTT F	AGC	AAG K	ACC	CGG R
406 AAG K	460 TCA S	514 AAT N	568 GTG V	622 GGC G	676 TGG W	730 CAG Q
GAC	CAA			GGT	TCA	TAC Y
CGG R	TGC	999 9	TAC	CAA Q	GTC V	CTA L
397 GAA E	451 GAC D	505 ACA T	559 CGG R	613 TTC F	667 GCT A	721 GAG E
CTA L				CTG L		
GAA E	TCT	AAC N	AGT S	ATC I	GGA G	TTA L
388 GAG E	442 TGG W	496 TAC Y	550 GTT V	604 CTG L	658 AAA K	712 AAC N
ATT GAT I D	AAT N	AAA K	GAT D	ACC	AAG K	TTT
ATT I	GCC	CTT	ACT	CCT	GAC D	GAA E

### FIGURE 2B

다닭	7. F	o. [−	m 45	ر 2	Ü T	C 2	<b>თ</b> [⊣	m A
811 GAT D	865 CCT	919 TTT	973 TAA	1027 TGG	1081 . TGG	1135	1189 CCT	1243 ' AGA
TCA	TCT	CTT TTA	TTT	CTG	1081 AAA TGG	GAC	1189 TGA CCT	1243 TAT AGA
GTG V	TCC TCT	-	TGA	ATG	999	1135 TCA GAC ATC	AGT	999
802 CCC ACC ACA GTG P T T V	856 AGT GCT	892 901 910 CCA TAA CCA CAA GCC TGA GGC TGC AGC	946 955 964 973 TGA CTG GGT GGG GCA TGC AGC TTC TGA TTT TAA	1018 1027 CCT GCC ATG CTG TGG	1072 CGG AGG	1126 AGC TAT		1234 CTG
ACC	AGT	TGC	AGC	CCT	CGG		CTT	1234 ATG CTG
CCC	299	299	JGC	AGG	GGA	ATC	TTC	
793 ACC T	847 TTT	901 TGA	955 GCA	1009 . GGA	1063 CTC ATA GGA			1225 GGT
GCT TCA A S	CAC	$\mathcal{O}_{\mathcal{O}}$	GCA	1 ACA	CTC	CTG	TCA	1 TAA
GCT	CCT	CAA	999	CCT	GAT	TAA	GTT	$\mathcal{C}\mathcal{C}$
784 GTG V	838 TAA GAT CCT CAC	892 CCA	946 GGT	1000 1009 AGG CAC CCT ACA GGA AGG	1054 GAA AGA GAT	1108 GTG TGT		1216 1225 ATT TAA CCC TAA GGT AAG
CCT P	TAA	TAA	CTG	1 AGG	1 GAA	1 GTG	1162 TCT GTG	1 ATT
CAG Q	AAA K			GTC	CAA	TCA	AAC	TAG
775 GAG E	829 GAT D	883 TYT	937 CTG	991 ATT	1045 GAG	1099 CTT GGG	1153 CCA TGA AAC	
CCT GAG P E	AAG K	AGG CTC	TGG	GGA	1045 TCA CTG GAG		CCA	1207 GGT TAG ACC
	AAG K	AGG	CTT	TAG	TCA	AAG	TCT	GGT
766 ATC I	820 AAC N	874 TCC	928 TCC	982 ATC	1036 GTT	1090	1144 GTT	1198 ; CTT
766 GAC AAT ATC D N I	GAA	GTC AAT	TTT	982 AGA GGC ATC	1036 CCA ACT GTT	1090 TTT CCC TCC	1144 TCC ATG GTT	1198 GCA CAG CIT
GAC	999 9	GTC	ATG	AGA	CCA	m T'T'	TCC	GCA

### FIGURE 2C

1279 1288 1297 CTT CCT TAA GCC CTT CTG GCT TCG	1342 1351 CTA GTC CTA AGG AGA	1378 1387 1396 1405 TAT CAT TGA AGA CAA TAT TGA ACA ACC CCC TAT	1459 TTG TGT GGT	1513 ATA CTC CCC	
1288 GCC CTT	1342 CTA GTC	1396 TGA ACA	1450 TTT CCT	1495 1504 CAC TAA CCC TCT GAC ATA	TTA 3'
TAA	TCG	TAT	GAC	သည	GGA
1279 CTT CCT	1333 ACT TTG	1387 AGA CAA	1441 GCT TGA	1495 CAC TAA	1549 AGA TTG
TTG	CTA	TGA	GAG	TTT	AAA
1270 GGA CTC	1324 ATA AGC	1378 TAT CAT	1432 1441 1450 TGA ATA GAG GCT TGA GAC TTT CCT TTG	1477 1486 AGA AAT CCC CTG GAC TTT	1540 TCC GTA ATA AAA AGA TTG GGA TTA 3'
CAA	AGT	TTT	999	CCC	TCC
1261 1270 ATT TTC CCC CAA GGA CTC TTG	1315 1324 1333 TTC ATT AAA AGT ATA AGC CTA ACT TTG TCG	1369 A CAA AGT TTT	1423 NT GAG AAG GGG	1477 3 AGA AAT	1531 TGA TGG CTT
		CCA	ra;	AGG	
1252 ACG CTA AGA	1306 TTT ATG GTC	1360 AAC CTT TAA	1414 TTT GTG GGG	1468 AGG ACT TGG	1522 ACA CCC AGT
CTP	ATG	CTT	GTG	ACT	သသ
ACG	TTT	AAC	TTT	AGG	ACA

#### FIGURE 2D